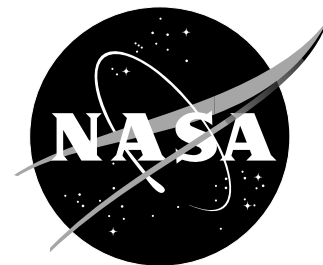


NewsRelease

National Aeronautics and
Space Administration

Langley Research Center
Hampton, Virginia 23681-0001



H. Keith Henry
Langley Research Center, Hampton, Va.
2001
(757) 864-6120
h.k.henry@larc.nasa.gov

For Release: Oct. 4,

RELEASE NO. 01-101a

NAMED AMONG 100 BEST NEW TECHNOLOGY PRODUCTS

NASA high-tech foam has many uses

A NASA-developed foam that can take many forms and be made into dozens of different products has been named one of the 100 most significant new technical products of 2001.

Originally developed as a high-performance structural material for spacecraft, the foam can be used as a superior flame retardant for fire protection, as thermal or acoustic insulation or to reduce weight in structures. Because of these and other qualities, it can benefit a variety of commercial applications.

The R&D 100 award is presented annually by *Research and Development Magazine* to the innovators of the 100 most technologically significant new products of the year from around the world. A panel of 70 distinguished scientists and engineers made selections.

NASA Langley Research Center, Hampton, Va., partnered with Unitika Ltd., Kyoto, Japan to jointly develop and commercialize the technology. SORDAL, Inc., Holland, Mich., has a non-exclusive license with NASA and Unitika to market foam products based on the technology.

The high-tech foam, called TEEK by its U.S. and Japanese developers, can take the form of traditional-looking foam, foam-filled honeycomb or other structurally-reinforced shape, or as tiny microspheres.

Judges were impressed with TEEK's ability to foam in place during installation and repair, greatly reducing labor and material waste costs. They were also impressed with its rating of low flammability with no toxic fumes, as well as several other mechanical and thermal qualities.

Technically a chemical compound called a polyimide, TEEK starts as a salt-like precursor powder that can be processed into polyimide foams through normal heat-based foaming techniques.

Michigan-based SORDAL plans to use TEEK as insulation for ship hulls, for fire-resistant construction materials, in various aerospace applications, and in a wide range of consumer products to improve safety and energy efficiency. Two Japanese companies have licensed TEEK for use in automobiles, office automation equipment, electric and electronics products, and reusable launch vehicles for space travel.

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In the 34 years of NASA Langley's participation in the R&D 100 competition, 34 NASA Langley developments have been selected.

Individuals to be honored October 4 at the Chicago Museum of Science and Industry: From NASA Langley, Terry St. Clair and Erik Weiser; from Unitika, Yoshiaki Echigo and Hisayasa Kaneshiro.

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